1: Burrows--81-82 (1947-48) Woleaians
116, 502, 823 Ifalik

"Lore of Currents"

On any voyage, as soon as the canoe is out of the pass and far enough from the island it is leaving to be clear of currents affected by that body of land, the direction of the current in the open sea is tested. First the sheet is let go and the sail left flapping until the canoe loses headway. Then several light lines, weighted with sinkers, are lowered over [82] the sides. Each has attached to it a strip of coconut leaf, as shown in Figure 18, to act as a weather vane. The lines are lowered until these strips are far enough below the surface not to be knocked about by waves, but are still in plain sight. The current will then swing them around until the longer end points in the direction in which it is flowing. The several lines provide a check on each other, and prevent the navigator from being misled by some accident, such as a swirl of water around bow or stern, that might affect one of the vanes.

The captain then picks his course to allow for the current. If, for example, the current is flowing from north to south, he will choose a guiding star farther north than the true direction of the island he is heading for. Thus he guards against one of his great perils, --drifting off his course (mennāxo)."

1: Burrows--82-83
116, 487, 502, 823

(1947-48)

Woleaians
Ifalik

"Detailed Sailing Directions

The following directions include, besides guiding stars, some further directions: a rear sight on Ifalik while it remains above the horizon; choice of guiding stars according to the current; and directions for recovering a destination which has been misled. In naming the stars in these more detailed directions, Tom omitted the prefixes tagali-or tubwuli-for rising or setting, and his example has been followed.

Ifalik to Woleai and Return

Guiding Stars- Ulu, a little north of west. If current is flowing north, Mailap, due west; if it is flowing south, between Ulu and Mwarigari.

Rear Sight- Keep Matolo, the channel between Falārik and Falālap, 'open'; that is, visible throughout its length. Keep the islet Ellā in such a position that 'two fathoms' of Falālap are visible to the south of it.

Birds- If the navigator drifts off his course and 'goes to Mailap' instead of to Ulu, passing south of Woleai, he will see two small black and red birds (gerap). He must 'leave them to the south'; that is, turn north from where he sees them.

If the canoe drifts north, and goes to Mwarigari instead of Ulu, two white sea birds (paiennai, bigger than a fairy tern) will be seen. They must be 'left on the south.' Woleai will not be far, but it will be necessary to have a lookout climb the mast in order to see it.

If the canoe continues on a course too far to the north, after leaving the paiennai birds, a shark will be seen of the kind called malrang, of the bright red color of turmeric face-paint. Then it will be necessary to take a course a little east of south ('east half south', Tom called it). [83]

Stars for Return Trip-The star indicating the true direction is Elieli. If the current flows north, take a course between Elieli and Mailap; if it flows south, between Elieli and Sarabwol."

1: Burrows--173 (1947-48) Woleaians
116, 775, 823 Ifalik

"Tom said that the gods of navigation live in a part of the sky reserved for them, but did not give it a name. Since Virár is one of these gods, it might be inferred that this place is Ururio (Ruialo), named as his home. Yet the myths about seamanship are set largely in Bwennap, which seems identifiable with the earthly island Pulap (p. 163). Longolap and Longorlk travelled from there to Pie li Eluluei (Sands of Aluluei). Pie li Eluluei resembles Bwennap (but not Pulap) in having only sand and one tree above ground, but a large and populous place below, abounding in all food-producing plants. Sarfert-Damm name another residence of Aluluei - the island Piemal, three months' journey by canoe to the south of Ifalik.

'Naturally, the gods of navigation were accomplished travelers. Aluluei went from Bwennap to the strangely similar Pie li Eluluei by magic. Valur and his brother Wëriëng went by canoe from Bwennap to Truk; and Valur, after he changed his name to Sagol, visited Ifalik and all the islands about. Since the canoes of these gods roam the skies as well as the seas, there is no great difficulty in supposing that they could take off from one medium to the other, like a sea-plane. Nevertheless, the information at hand does not enable us to plot the celestial islands on a chart."

4: Krämer--124-125 (1909) 1937 Woleaians -1-3
116, 103, 823 Elato

The following islands are known and in addition numerous rocks are named: eastwards, tuas:

Sëtoval*
Pikëlo** (lo anchorage) (NE)
Pik ("small island")***
Olóul or Volóul (Onóun Volume 61 page 191)

Mágur
Ulalu
Piserar
Fáiau ("stone")
Lámoil
Rua
Murilo
Rug or Djug (Truk page 19)

Póloat****
Sog
Tametam
Pol'lap [126]
Lémma (Nama
Lámolu (Námoluk)
Lukulór (Lukunor)
Lukuór (Nukuor)
Pikeram(Kapingamar-
Ingadjig(Ngatik)[angi)
Fálepei (Ponape)
Maki (Mokil)
Pingelap
Gajau (Kusae Truk page 53)

*East: Oraisaŭ, Suat, Póloat. North: Uraitúefu, Gaitag (east of Pikëlo (2)).
**Also Pikelot, supposedly named after the fish lot.
***West: Bäbä (near Gaitag), north: Sapan, Móul, east: Olipig, Fauriap, Onóun.
****South: Rúral, Sog.

4: Krämer--124-125 (1909) 1937 Woleaians-2
116, 103, 823 Elato

Ebon in Ralik
Salevis (Djalūt)
Laur

North:

Miriales (=Marianas Spanish)
Faiau (high) and south of it
Ralugoisong. (Vorolegeisam

West:

Oléa
Faróilep
Ifaluk

Aúrupig
Sorol
Feis ("Rocky")
Ulûtiu or Ulutiu(Moke-
Eap [mok)
Ngólu
Ban noe(Palau I, page
Sóngorol [184)
Bul
Merir
a Tógobei (Tobi)

A. V. Chamisso. . . tells us that the Ralik and Ratak Islands were known to a native of Lamureck whom he met on Guajan. On Arno. . . in the Ratak group, there lived five natives of Lamureck who had been cast adrift and carried to this island.

The Names of the Parts of the Ocean are:
between Lámotrek and Sëtoval= Oireg*
between Lámotrek and Olimarau=Goisa
between Lámotrek and Elat =Mëtol

* Woirä; but it is not mentioned that on Sätoval Lamotrek is said to be called Lamõireg.

4: Krämer--124-125
116, 103, 823

(1909) 1937

Woleaians-3
Elato

between Lámotrek and Ifaluk=a Pilerup
between Lámotrek and Fariolep =Pilimetau

4: Krämer--273-275 (1909) 1937 Woleaians-1-3
116, 823 Woleai

On Oleai, the following islands are known:

Waghal, Guajan or Guam (see Kotzebue, Entdeckungsreise... Vol. III, page 93).

Bannŏe	Eā̆urpĕk
Eap	Faráūlap (Fadjaūlap), also Faroelap
Katogóbei (Tobi)	
Merir	Ifaluk
Bul	Wolé̊a
Sóngorol	Elát
Soról	Olimarāo
Ngolu	Námodjek
Namolūlūtíu (Mogemog)	Sĕtovan
Fais	Fáiĕo [274]
Pikĕlo	Setovalaito
Pikĕlot	Nukulóor, Nukuor
Poloat	Pikĕram (Kapinga...)
Sóuk	
Tamèlam	Vóroluk
Bón'nap (Pollap)	Ingádjik (Ngatik)
Volóul (Onoun)	Fálepei (Ponape)
Pisĕrars (...ĕdj)	Pingelap

Volou
Mákor
Faiĕoín
Namoín
Falálu
Rūo
Mūrilo
Dju (Truk)
Losap
Némo
Namolúk
Gúiop

Mokil
Gadjau (Kusae)

Rātak
Tapitóuĕ (Gilbert Islands)
Arorai
Náuro

Sáneuis
Jépōn
Vŏu

lugáiapal is the term for any place where the sun happens to be at zenith, e.g., the tropics. Anything north or south is considered this side and that, peigil ma peigil.

The native, Kadu, mentions the visit of Palau (see Kotzebue, Entdeckungsreise... Vol III, page 31).

Lands (falu) in the south, countries of the black people:

In the East, South of Pikeram:

Faluelnugaraurau

In the West, South of Bunat (St. Davids):

Falučlidjel
Falučlikelau

Faluelnumáu	Faluĕliep
Faluelnúdja	Jĕvisi
Faluelnutétĕn	Námofizi
Faluelluiól	
Faluelnauporoi	Mores

These statements are of importance in view of the special nautical experience of the Oleai islanders due to old-established contacts of the Carolinians and Melanesians, but nevertheless localization is extremely difficult. In Lukunor-Namoluk Nudja is listed, which probably is the known island of Nusa at the northern tip of Tombara. Numau here may be identical with Numul there; Nuiol may equal Nuol, etc., so that the Melanesian places in the past [275] most likely must have been known over a wide area.

6: Senfft--55
116, 823

(no date) 1905

Woleaians
Woleai
Lamotrek

The natives have a thorough knowledge of the stars and configuration and use it to determine the geographical position of other islands; their knowledge of geography thus covers an extensive area.

14: Born et al--568-570 (1907) 1907 Woleaians-1-2
152, 823 Woleai

[MR: During the typhoon of March, 1907] We soon left the Japanese station and betook ourselves to the most westerly canoe house of the village of Jaur, where a large part of the inhabitants of the island had gathered. The people had completely lost their heads. Like birds in a cage unable to find their way out, they ran aimlessly back and forth, anxiously listening to the roar of the surf. No efforts to encourage or console them did any good. All believed that the sinking of the islands had come and that the old prophecy would now be fulfilled that Oleai would one day be washed away by the sea. When the sea began to come further and further inland from the lagoon, we had to abandon this place, too. The Japanese traders appeared and reported that a wave coming from the interior of the island had washed away their trading station in a moment. So we had to withdraw into the interior of the northwestern point of Ifang. That was our last recourse. If the sea reached this part of the island too we were lost. Here there stood a house on a little knoll in which a large crowd of screaming, weeping natives had taken refuge. Some women were singing death laments in their distress. When a man suddenly announced that the sea was now coming also from the northeast out of the bush, the confusion reached its climax. I climbed a broken down coconut palm and saw the waves, like white cats, leaping through the woods from the northeast. When I came down from the tree the water was up to my hips. We provided ourselves with planks of wood and strong ropes and turned again to the lagoon side of the island. The water was fortunately rising slowly; the wind was weaker. Then we saw a mighty breadfruit tree which had been

wrenched from the ground with all its roots. We climbed up on these roots, which stood several meters high, and found ourselves relatively secure there. Scarcely had we found this place of refuge (it must have been about 9 in the morning) when the real typhoon set in from the east-southeast.

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

CHAPTER III

MAPPING THE BOONDOCKS

THE IDEA was to study the human ecology of Ifaluk: the interrelations of man, his culture, and the environment. For man and his culture there was the reservoir of information accumulated by Burrows and Spiro during their 1948 residence on the island: studies which Ted planned to continue during his second visit. Don and I, with the enthusiasm of amateurs, wanted to help in this anthropological work. But there was also the environment to be studied—the land, the reef, the lagoon, the sea, the plants and animals. This "simple" situation—260 people living on half of a square mile of coral rock and sand—was incredibly complex.

When we had finished the counting, weighing and measuring of *Homo sapiens*, the next step seemed to be a start with the environment. The logical first move here was a map, a topographic survey of the situation.

The map problem was greatly simplified by the fact that a little previously a Navy reconnaissance plane had made a series of vertical and oblique aerial photographs of the whole atoll. The Ifalukians were fascinated by these photographs. They seemed to have no trouble at all in grasping the significance of either the vertical or oblique shots, and most people easily recognized the major landmarks, even locating their particular family dwellings. They knew the atoll thoroughly, and the aerial photographs gave them a chance to stand off and look at the whole thing at once, for the first time.